Boyce Industries Pty Ltd



# RevAdmin User Guide

Version: 1.9.5

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# Introduction

# **Copyright and Licensing**



#### RevAdmin

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### **General Introduction**

Welcome to the Reveloc system from Boyce Industries.

Boyce Industries provides both customised and off-the-shelf style software and mapping solutions for tracking vehicles fitted with a GPS and appropriate communications hardware.

The system provides basic functionality that allows one or more vehicles to be tracked on one or more maps via a continuous polling or position on demand mechanism.

You should be generally familiar with the use of Microsoft Windows XP (or later) and some database / networking knowledge may be required if you are wanting to install / maintain the system without assistance.

This User Manual will detail the various operational functions of the Administrative side of Reveloc and should be read in conjunction with the Reveloc Viewer manual where appropriate.

As an overview, the User Manual is broadly divided into the following:

Installation
Registration
Getting Started
Configuring RevAdmin
Fleet Manager
Device Manager
Base Device Controller
Display Summarys

#### Installation

Reveloc can be configured to use any of the following databases:

- Microsoft SQL Server 2000 / 2005 / 2008 / 2012
- Microsoft SQL Server Express 2005 / 2008 / 2012
- Microsoft Desktop Engine (MSDE 2000)
- · Microsoft Access

#### SQL Server / MSDE

If you wish to use either SQL Server or MSDE you will need to run the RevServer structure and data .sql scripts located in the SQL folder of the supplied CD / DVD and set up any users with appropriate permissions before running either the RevAdmin or RevViewer programs. RevAdmin uses Windows Authentication as its means of accessing the RevServer database.

**IMPORTANT**: Before applying the script you should also make sure that the data path specified in the RevServer-*version*-Structure.sql matches your installation. The default folder set in the script for both the Data file and the Log file is: C:\Program Files\Microsoft SQL Server\MSSQL10.SQLEXPRESS\MSSQL\DATA

#### General

That said (and done), you can now start installing RevAdmin as follows:

- 1. Insert the supplied disc into the appropriate drive.
- 2. Double click on My Computer, select the appropriate Drive letter (e.g. F) and open the drive.
- 3. Select the RevAdmin-Setup.exe icon and double-click to activate the install mechanism.



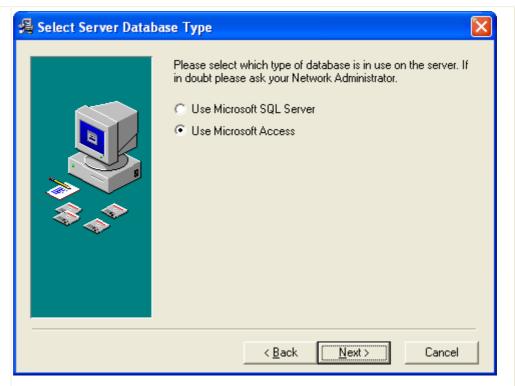
The install program will now prompt you through a series of 'Typical' install dialogue screens.

4. Select **Next** to proceed or **Cancel** to quit the installation procedure.

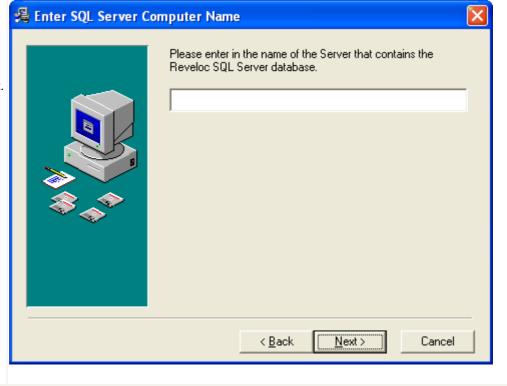


5. After the License
Agreement and
Destination Selection

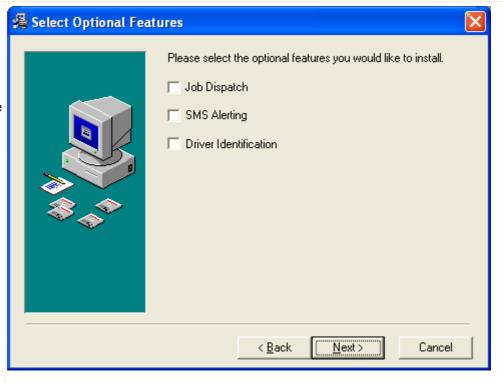
dialogues you can choose the type of database you wish to use. Microsoft Access is the default selection, if you are using it then click **Next** and skip to Step 7 otherwise select the SQL Server option and click **Next**.



6. Enter in the name of the computer that is running the instance of SQL Server where you setup the RevServer database and click Next.



7. You should now see a dialogue that allows you to choose the optional features to use with Reveloc. Simply place a check in the box of each feature you intend to use and click **Next**.



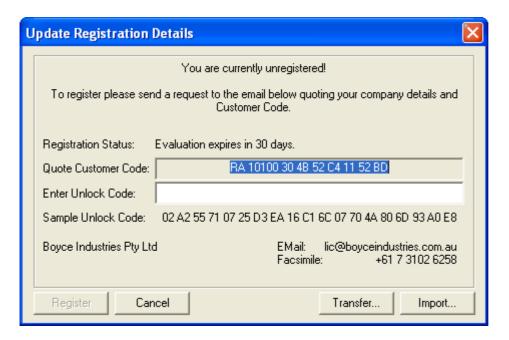
Follow the rest of the on screen instructions to complete the installation. Please note that you will need to restart the computer at the end of the process.

### Registration

Once installed, RevAdmin will allow you to use the program's features and have one active RevViewer connection for a period of 30 days without registering. While unregistered you will be prompted with a message window each time you start the application.



In order to register, choose the **Registration** item from the **Help** menu. You should see a window appear similar to the one below.

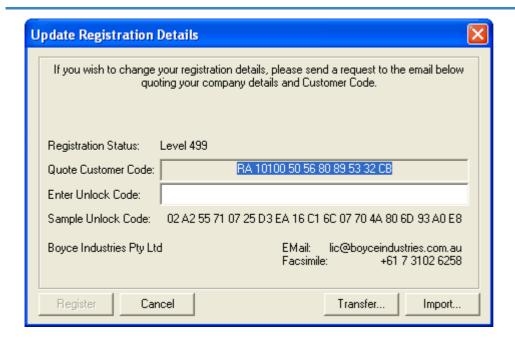


Registration is currently available via facsimile or email:

- 1. Highlight the **Customer Code**, if it isn't already.
- 2. Copy and Paste it into an email or fax and send it to the appropriate address or fax number. Codes are usually processed within 1 business day.
- 3. Once you have received the **Unlock Code**, copy and paste it in to the space provided. *The Register button should now be enabled.*
- 4. Click the Register button.

If the code was correctly verified, you should see a small popup window with a Confirmation Code that matches the one sent with your Unlock Code.

Once you have successfully registered, next time you select the Registration item you will see a dialog similar to the following:



#### **Transferring Licenses**

RevAdmin uses a floating license as part of its security system. The **Transfer...** and **Import...** buttons

are used to transfer the licence to a floppy disk so that it can be transferred to another computer computer and be re-imported.

#### Important:

- If you do not register the product within the specified period then you will be presented with a Registration dialog as soon as you try and run the application.
- Once a license has been transferred off a particular PC, that installation of RevAdmin will no longer run until the license is re-imported.
- · License transfer via floppy disk is NOT supported for USB drives!

# **Getting Started**

#### Main Screen

By default, a shortcut for RevAdmin is installed in the Windows Startup menu so that the application starts automatically when Windows does. An icon will also be placed on the desktop and can be used to restart RevAdmin if necessary. The RevLauncher program runs in the background and continuously monitors the state of the RevAdmin program. If for some reason RevAdmin becomes unresponsive or a user accidentally closes it down, RevLauncher will automatically restart it. If RevLauncher itself has been shut down and is not running, it can be started by:

1.

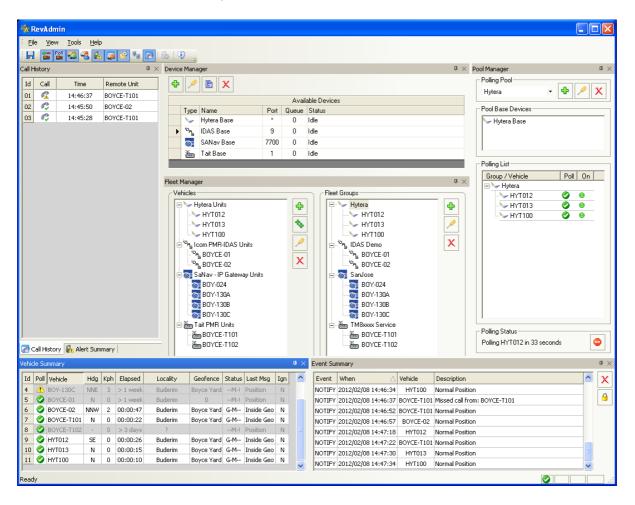


Revelo

Double clicking on the Administratordesktop Icon or

- Clicking on the Start button, selecting Programs then Boyce Industries and selecting the Reveloc Administrator item or
- 3. Double clicking on the **RevLauncher.exe** file in the applicable directory.

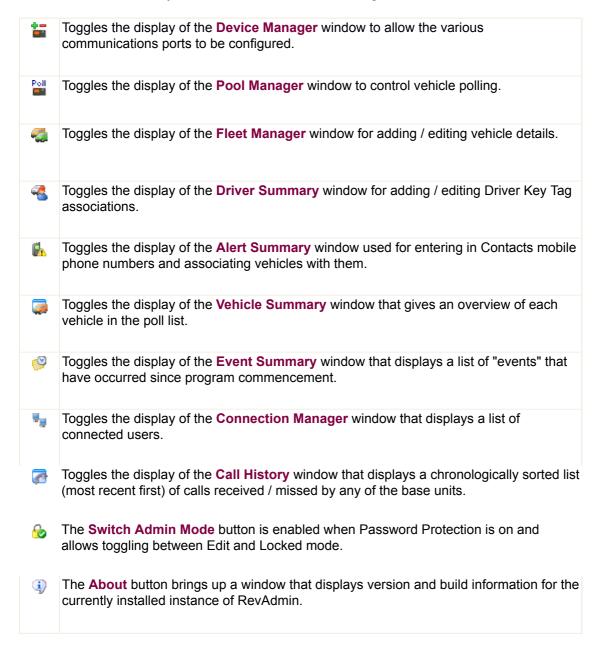
This will activate the software and present the Main screen from which all functions are activated.



#### **Main Toolbar**



The Main Toolbar is always visible and contains the following buttons.

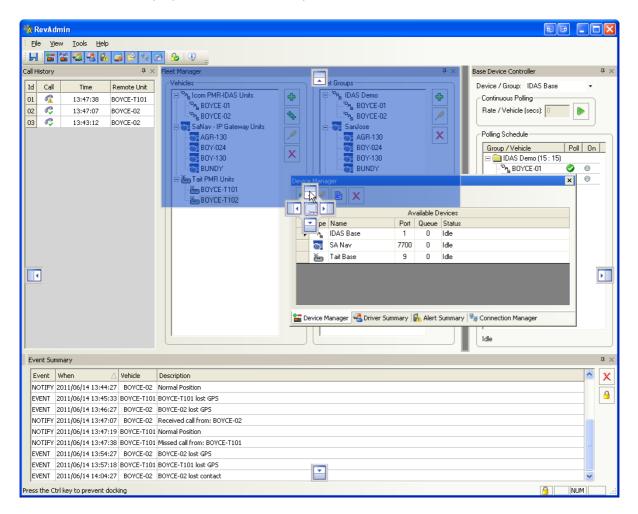


### **Docking Windows**

A number of RevAdmin's controller windows can be "docked" to the frame of the main window. These include:

- Device Manager
- · Fleet Manager
- · Connection Manager
- · Device Controller
- Vehicle Summary
- · Event Summary
- · Driver Summary
- Call History

Windows can be moved around by clicking and holding down the left mouse button on a Windows' title bar. After you start to drag the window, a number of docking highlights will pop up on the screen as you move the window over other windows. Simply move the mouse cursor over the highlight to see what effect the docking will have. The shaded purple area indicates the position of the window after the mouse button is released.



If you move the window over the top of one that is already docked, you also have the option of adding that window as another tab by releasing the mouse over the centre Tab icon.



If you do not want the window to dock, simply hold down the Ctrl key while you are moving it. Double clicking the left mouse button on a window's title bar will also undock it.

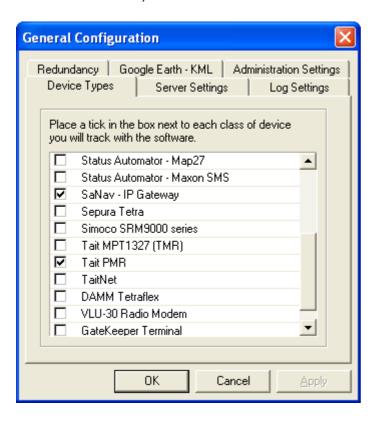
# **Configuring RevAdmin**

# **General Configuration**

The General Configuration window can be accessed from the **General Configuration...** item on the **Tools** menu.

# **Device Types**

The **Device Types** section provides for control over the types of base devices that you will be using for your installation of Reveloc. Generally you will only need to select one checkbox (unless you have a mixed communications fleet).



Please note that any changes to these settings will require you to restart the RevAdmin application in order for everything to function correctly.

### **Server Settings**

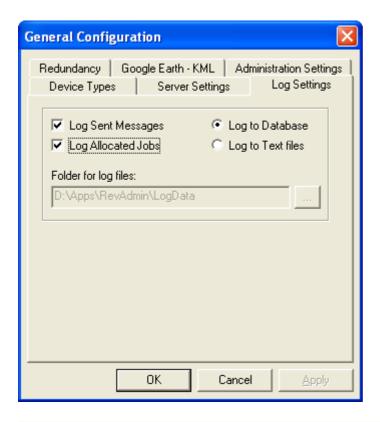
The **Server Settings** section displays the Computer Name that RevViewer users will need to connect to. It also contains a field that allows you to specify which port the RevAdmin program will "listen" on for remote connection requests from RevViewer users. Please ensure these settings are correct on the RevViewer client(s) if they are having trouble connecting and that the server has the port in question open.

The other option provided indicates whether or not the program should use a SQL Server database and if so what the name of the server computer is and how it should be accessed for log on purposes.



# **Log Settings**

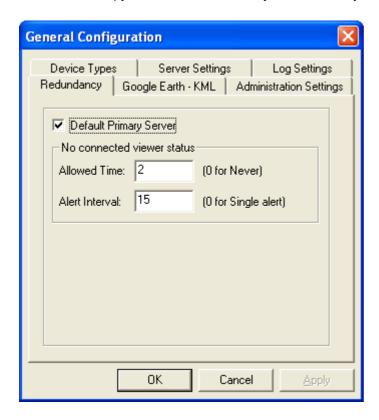
The **Log Settings** section allows for the customisation of several logging options not covered by individual devices or vehicles.



Log Allocated Jobs	If ticked, writes out a line to a text file after each job is sent to a mobile. When the <b>Log to Text files</b> option is set one file will be generated per day and named as follows:  Allocated Job Log YY-MM-DD.log
Log Sent Messages	If ticked, writes out a line to a text file after each message is sent to a mobile. When the <b>Log to Text files</b> option is set one file will be generated per day and named as follows:  Sent Message Log YY-MM-DD.log
Folder for log files	Folder where the above log files will be stored (only relevant if logging to text files).

# Redundancy

The **Redundancy** section allows for the 'role' of RevAdmin to be set. Installations that have no redundant copy of RevAdmin running on a second server should always have the **Default Primary Server** box ticked. This ensures that RevViewer clients connecting to this instance of RevAdmin will receive notification of vehicle positions / events. If the copy of RevAdmin is actually the 'secondary' instance then leave this box unchecked.

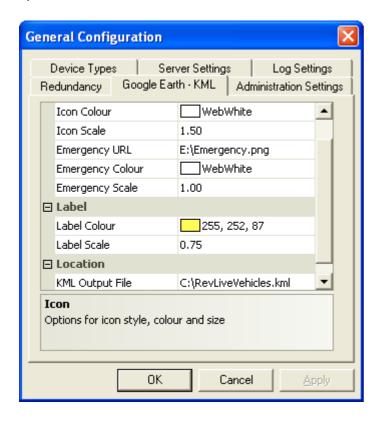


# No connected viewer status

When RevAdmin is being used as part of an emergency monitoring system it may be desirable to notify system administration personnel if there are no RevViewer clients connected. The **Allowed Time** value represents the number of minutes that can elapse without any connections being present before an alert is raised. If the situation is not remedied within **Alert Interval** minutes then further notifications are sent at this interval.

### Google Earth - KML

Users wishing to take advantage of Google Earth's network link facility can setup RevAdmin to dynamically update a KML file via this tab.



The KML Output File field can be used to enter or select a file to output the appropriately formatted data to whilst the other fields allow various shape, colour, label and size features to be customised.

It should be noted that the Icon URL (off screen), Icon Colour and Icon Scale entries are simply used as defaults and are generally superceded by setting these values for specific Vehicle Classes via the Fleet Manager.

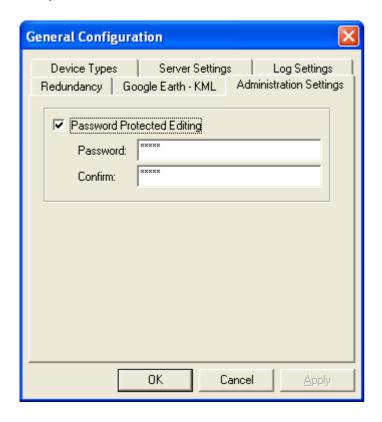
Also, **all** units in an SOS / Emergency alert state will be assigned the Emergency style that is set in the window illustrated above.

Please refer to Google Earth documentation for help in setting up the actual Network Link in that software.

Note: Use of Google Earth for mobile GPS tracking in a commercial application is likely to require a Google Earth Pro subscription.

# **Administration Settings**

The Administration tab allows a user to set a password to lock down RevAdmin so that general editing cannot take place.



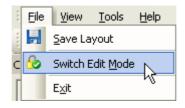
When the Password Protected Editing option is ticked and an appropriate Password and Confirmation entry have been set, RevAdmin will switch to a Locked down mode.

This will result in the button being enabled on the toolbar and the status bar changing from NUM to NUM .

If you need to perform editing after RevAdmin has been locked, click the **b** toolbar button and you will be asked to enter in the Administration password.



Once a correct password has been entered, RevAdmin will revert to Administration mode until the button is pressed again to switch back to Locked mode. This function is also available from the File menu:

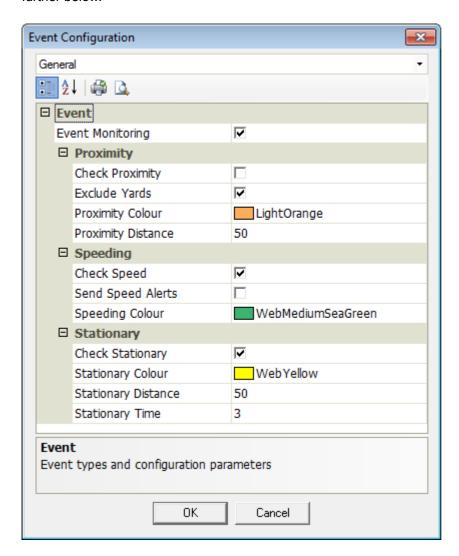


# **Event Configuration**

The Event Configuration window can be accessed from the **Event Configuration...** item on the **Tools** menu.

### General

The **General** section contains several options for monitoring high level event types. Each item is discussed further below.

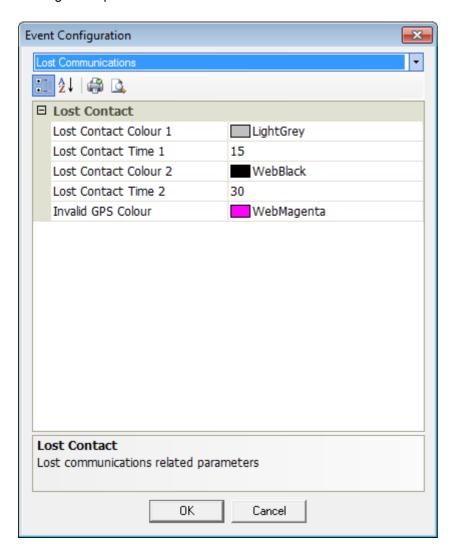


Event Monitoring	Indicates whether or not general event checking will be performed for each incoming position.
Proximity	If Check Proximity is ticked then whenever remote units come within the specified Proximity Distance of each other a general proximity alert will be raised.  The option to Exclude Yards is useful for reducing unnecessary events from being raised when units are congregating back at base for example.
Speeding	If <b>Check Speed</b> is ticked then each position from a remote unit with a speed attached will be checked against the setting for the unit itself to see whether or not the unit is exceeding that general preset value.  If <b>Send Speed Alerts</b> is ticked then a warning message will be sent to the remote unit if the hardware supports it.
Stationary	If <b>Check Stationary</b> is ticked then a stoppage alert (of sorts) will be generated if positions from a remote unit all fall within the specified <b>Stationary Distance</b> radius (set in metres) for longer than the <b>Stationary Time</b> (period in minutes).

Any events detected for a vehicle (that itself has Event detection enabled) will result in the vehicle being coloured with the specified **Event Colour** in the RevViewer display.

### **Lost Communications**

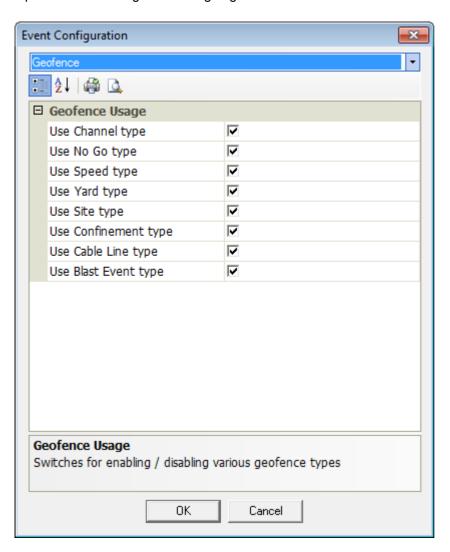
The **Lost Communication** section provides a two stage mechanism for keeping track of which remote units may no longer be operational.



Lost Contact 1	This is the first tier lost contact interval to indicate that a remote unit has not responded with a valid GPS position within a number of minutes as specified in the <b>Lost Contact Time 1</b> field.
Lost Contact 2	If a valid response has still not been received from a remote unit within <b>Lost Contact Time 2</b> time frame then it is considered "lost". This status can be used in conjunction with a setting in RevViewer to ensure mobiles that are not active are not cluttering up the map display.
Invalid GPS	The Invalid GPS condition is available for some types of hardware to indicate either an invalid or poor GPS quality signal has been received.

### Geofence

The **Geofence** section provides a high level controlling mechanism to let RevAdmin know whether or not a particular class of geofence is going to be used.



### **Geofence Types**

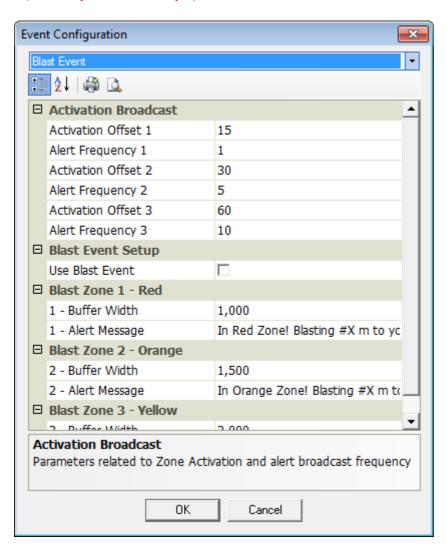
Channel	General coverage for a particular radio channel. The intention being to broadcast this geofence to intelligent tracking devices so that radio channel can be changed automatically upon entering the appropriate area.
No Go	Remote units entering a No-Go zone will trigger an Exception event in both RevAdmin and RevViewer.
Speed Limited	Remote Units exceeding the designated limit for this zone will trigger and Exception event in both RevAdmin and RevViewer.
Yard	Designed for future use in flagging events when vehicles enter a designated Yard
Site	Designed for future use in flagging events when vehicles enter a designated Site

Confinement	Designed to restrict movement of remote units within particular confines.
Cable Line	Prototype implementation for OH & S use in cable line logging applications.
Blast Event	Designed for use in mining applications where buffers around a specific core blast area get progressively activated to aid in warning any remote units that may be in or near the area around the time of the scheduled blast.

### **Blast Event**

The Blast Event section controls the settings behind RevAdmin's Blast Event geofence type.

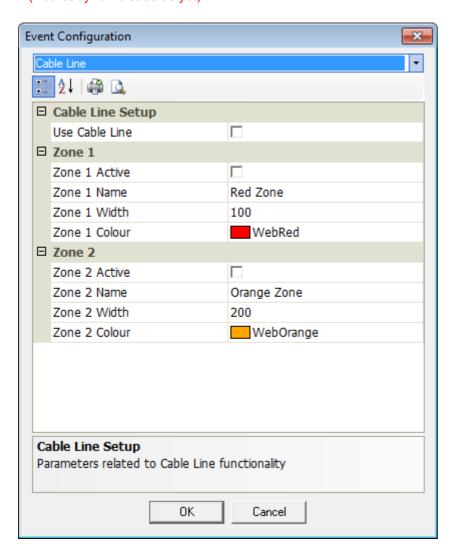
(Not ready for release as yet)



# **Cable Line**

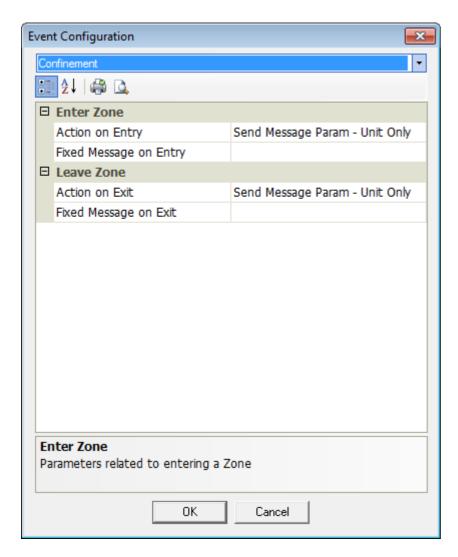
The **Cable Line** section controls the settings for RevAdmin's Cable Line geofence type.

(Not ready for release as yet)

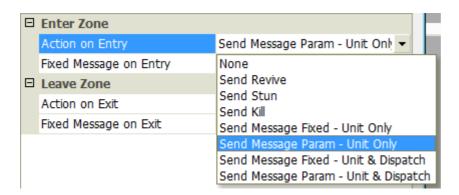


### Confinement

The **Confinement** section controls what action should be taken when a remote unit moves into or more importantly, out of, a confinement zone.



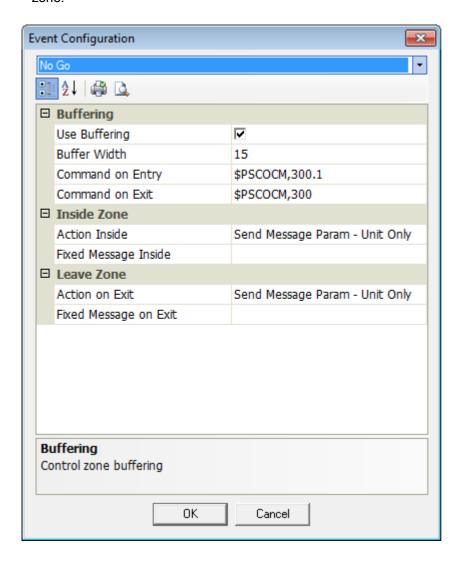
The possible list of actions are illustrated below with some options not available on all platforms.



The **Send Message Param** option uses the text specified by the user when setting up the geofence itself in RevViewer. While the **Unit and Dispatch** option picks up the Dispatch unit's ID from the geofence as well.

#### No Go

The **No Go** section controls what action should be taken when a remote unit moves into or out of a No Go zone



There are currently two available actions when a unit either enters / remains inside a geofence as well as when it leaves the confines of the area.



#### Inside Zone

Send Message Fixed - Unit Only

Send the relevant unit a fixed message whenever it enters or remains within a No Go zone. The message will remain the same no matter which No Go zone the unit is in.

Send Message Param - Unit Only

Send the relevant unit a message that is based on the parameters set against the individual No Go zone at the time it is set up.

#### Leave Zone

These parameters are exactly the same as above with the exception they are sent once upon the first position from a remote unit that is no longer within the No Go zone.

#### **Buffering**

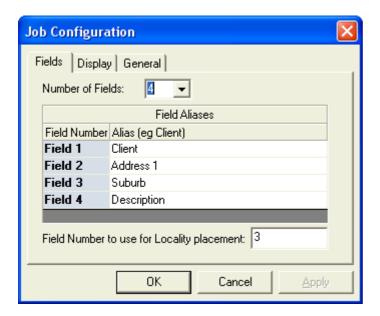
If the **Use Buffering** option is ticked, then a separate buffer area of size **Buffer Width** metres is placed around the extents of the core No Go zone. This buffer can then be used to do something special to assist in monitoring the remote unit. In the screenshot above when a unit first enters the buffer zone it is sent a command to effectively increase the polling rate so the unit can be monitored more closely for deviations into the No Go zone. Once the unit leaves the buffer area it will be sent another message to effectively restore a previous position reporting rate. It should be pointed out that there is a degree of hysteresis in the buffering algorithm such that once a unit enters the core No Go zone then it will continue to receive messages (if configured) until it not only leaves the core area but the buffer region as well.

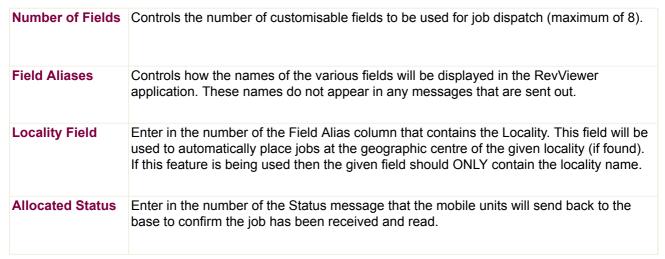
# **Job Configuration**

The Job Configuration window can be accessed from the Job Configuration... item on the Tools menu.

### **Fields**

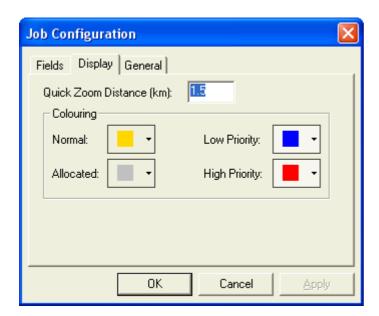
The **Fields Tab** is used to control the settings for how many fields will be used for job dispatch and what those fields represent.





# Display

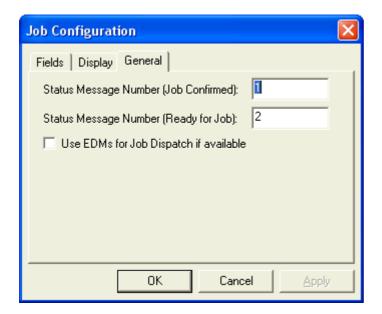
The **Display Tab** allows configuration of common display settings for all RevViewer clients.



Quick Zoom	This value (in km) controls how far to zoom in on the map when using the Zoom To Job function in RevViewer.
Colouring	Four colour options are available for distinguishing between job priority and status. It is possible to set all to the same colour if you want.

## General

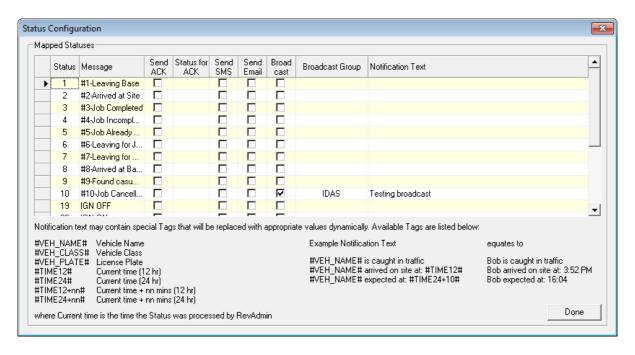
The **General Tab** controls settings relating to how short data and status messages relate to job dispatch functionality.



Status Message Job Confirmed	Enter in the number of the Status message that the mobile units will send back to the base to confirm a job has been received and read.
Status Message Ready for Job	Enter in the number of the Status message that the mobile units will send back to the base to indicate they are ready to receive their next job.
Use EDMs	Place a check in this box if the mobile devices support the receipt and display of Extended Data Messages.

## **Status Configuration**

The Status Configuration window allows statuses that may be mapped in the radio to be mapped in RevAdmin. It also provides an option to send out SMS messages or emails when a particular status arrives at the base.



Status	The actual status number programmed into the radio.
Message	The message that will be displayed in the Event Viewer \ RevViewer Vehicle Summary when the status is received.
Send ACK	If ticked, RevAdmin will automatically send an appropriate status (see below) back to the originating mobile to confirm the status was received.
Status for ACK	Number of the status message to send back to a mobile to Acknowledge a previous status.
Send SMS	If ticked, an SMS will be sent to appropriate contacts when the corresponding status is received. The actual message is defined by the Notification Text field.
Send Email	If ticked, an email will be sent to appropriate contacts when the corresponding status is received. The actual message is defined by the Notification Text field.
Broadcast	If ticked, a message will be broadcast to the specified Broadcast Group (see below) to notify the units in the group that a particular status has been received.
<b>Broadcast Group</b>	Name of the Fleet Group to broadcast the set message too (see above).
Notification Text	Content that will be sent via SMS / Email as appropriate, explained further below.

## **Notification Text Tags**

The Notification text can contain a number of optional "tag" fields that are substituted dynamically based on the mobile unit that sent the status message. Currently available fields are:

#VEH_NAME#	The name associated with the vehicle in the Vehicle Edit window (the one that appears in the Vehicle Summary panel).
#VEH_CLASS#	The class of the vehicle as selected in the Vehicle Edit window.
#VEH_PLATE#	The license plate as defined in the Vehicle Edit window.
#TIME12#	The current time when RevAdmin received the status (in 12 hour format).
#TIME24#	The current time when RevAdmin received the status (in 24 hour format).
#TIME12+nn#	Outputs a time equal to the time when RevAdmin received the status plus a specified number of minutes (in 12 hour format). The nn should be replaced with a number between 1 and 60.
#TIME24+nn#	Outputs a time equal to the time when RevAdmin received the status plus a specified number of minutes (in 24 hour format). The nn should be replaced with a number between 1 and 60.

## **External File Configuration**

If desired, Location names can be displayed within the RevAdmin Vehicle Summary window. In order to do this please ensure that the following requirements are met:

- 1. The UsingLocality entry in the registry under HKEY\_LOCAL\_MACHINE\SOFTWARE\Boyce Industries\RevAdmin\Configuration must be set to 1.
- 2. A file called **StreetSetup.txt** must be in the main RevAdmin folder. The format of this file is explained below.

The Street Setup file is broken into three main sections: Fields, Files and State Details.

[FIELDS]

PrimaryLocalityName=Suburb

PrimaryLocalityState=State

CountryTableState=STATE

LocalityTableLocality=LOCALITY\_NAME

RoadTableStreet=STREET NAME

RoadTableLocality=LOCALITY

MapReference=FullMapRef

[FILES]

PrimaryLocalityTable=C:\Program Files\Boyce Indsutries\RevAdmin\MapData\AusLocalities.shp GridTable=C:\Program Files\Boyce Industries\RevAdmin\MapData\tblGrid-WGS84\_rectangle.shp CountryTable=C:\Program Files\Boyce Industries\RevAdmin\MapData\AustBounds\_Region.shp NumStateFiles=2

State1=NSW

State2=QLD

[State: NSW]

 $RoadTable=C:\Program\ Files\Boyce\ Industries\RevAdmin\MapData\NSW\NSW\_ROAD.shp\ LocalityTable=C:\Program\ Files\Boyce\ Industries\RevAdmin\MapData\NSW\NSW\_LOCALITY.shp\ Admin\NapData\NSW\NSW\_LOCALITY.shp\ Admin\NapData\NSW\NSW\_LOCALITY.shp\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData\NapData$ 

[State: QLD]

RoadTable=C:\Program Files\Boyce Industries\RevAdmin\MapData\QLD\QLD\_ROAD.shp LocalityTable=C:\Program Files\Boyce Industries\RevAdmin\MapData\QLD\QLD LOCALITY.shp

### **Fields Section**

This area contains seven entries corresponding to the field names that will be looked up in the various mapping layers.

PrimaryLocalityName	Field in the PrimaryLocality Table (if present) that contains the name of the Locality.
PrimaryLocalityState	Field in the PrimaryLocality Table (if present) that contains the name / abbreviation of the state.
CountryTableState	Field in the Country Table that contains the name / abbreviation for the state.
LocalityTableLocality	Field in the Locality Table(s) that contains the name of the locality.
RoadTableStreet	Field in the Road Table(s) that contains the name of the street.
RoadTableLocality	Field in the Road Table(s) that contains the name of the locality.

-	Field in the Grid file containing the grid reference identifier that is used for cross reference with the grid cell's centroid stored in the RevServer database

### **Files Section**

PrimaryLocalityTable	Location of the layer containing the state / region boundaries used for determining an appropriate locality. Use this entry if all available localities are in one file.
CountryTable	Location of the layer containing the state / region boundaries used for determining an appropriate locality layer to lookup.
GridTable	Layer containing grid reference objects
NumStateFiles	Number of separate state files to be loaded for street / locality searching
StateX	Contains the value corresponding to the field that is returned for a state from the Country layer (as used in the State section below).

## **State Section(s)**

For each state that vehicles are going to be operating in, a separate section needs to be set up with section headings as follows:

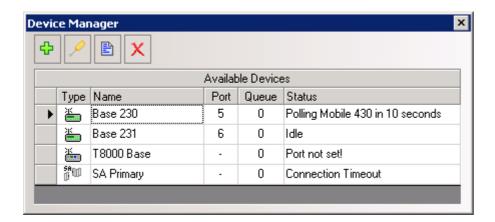
[State: State Name]

where *State Name* corresponds to the entry in the Country table. Each section then needs to have two entries: **RoadTable** and **LocalityTable** which specify the location of the Road and Locality layers respectively.

# **Device Manager**

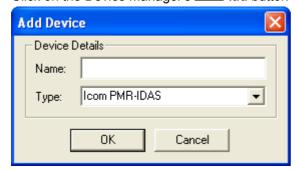
# **Device Manager Overview**

The Device Manager is used to configure the base radio(s) / devices that are going to be used for communicating with the various remote units.



# **Adding A Device**

1. Click on the Device Manager's Add button



- 2. Type in a short **Name** to describe the base radio that you are setting up eg IDAS Base.
- 3. Select the **Type** of base device.
- 4. Click on OK.



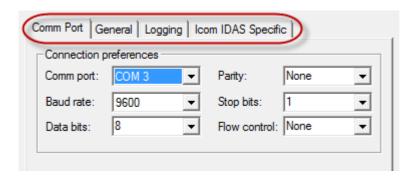
You should now see a new line added to the list of Available Devices. Please refer to the next section for details on how to configure the new device.

## **Configuring A Device**



Highlight the device in the **Available Devices** list that you wish to configure and then click on the **Properties** button.

In the Settings window you can see a number of Tabs (boxed in red below) that allow different options to be configured. All devices have several Tabs in common ie. Comm Port (or Socket Setup), Logging and Polling. Generally, each type of base device will also have its own Tab for device specific settings.



#### **Comm Port Tab**

In order for Reveloc to communicate with the attached device it needs to be able to connect via an appropriately configured communications port.

- 1. Select the appropriate **Comm port** from the list.
- 2. By default the Baud rate should be automatically set based on the selected device type. You "should" never need to change it or any of the other Connection Preference settings.

#### **General Tab**

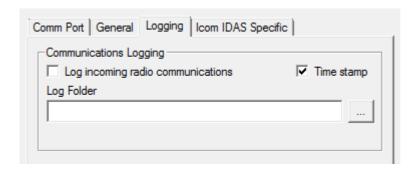


Two options are currently available in the General tab for most base devices.

The first **Process outgoing requests** is used to control whether or not the particular base device should be used for sending things like poll requests out to remote units.

The second, **Hold Off For Poll Response** is often useful with shared voice / data solutions where it may be beneficial to hold off polling for a matter of seconds in case a voice conversation is still in progress.

### Logging Tab



This section is designed more for debugging than anything else. By ticking the **Log incoming radio communications** checkbox and supplying a folder to create the logs into, any valid packets of information received from the attached device can be saved to a standard text file.

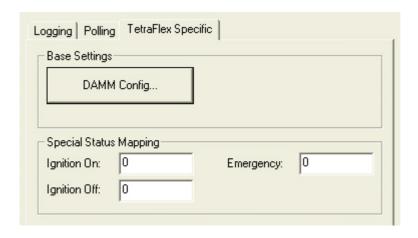
Text files are named as follows:

Comms Log yyyy-mm-dd.log

where "yyyy" is the current year, "mm" the current month and "dd" the current day of the month.

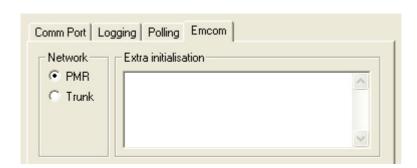
### **Device Specific Tabs**

#### **DAMM Tetraflex**



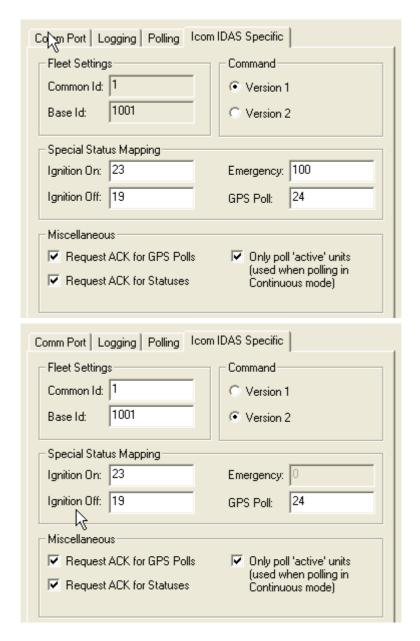
The tab is broken up into two sections, the first contains a single button which brings up the DAMM Tetraflex configuration window where IP and other gateway related settings can be entered. The second setting allows for three Statuses to be mapped that will allow RevAdmin to handle them specially ie. Ignition On / Off and Emergency alerts.

#### **Emcom URM**



The Emcom URM tab simply has two controls which allow the type of **Network** to be set and any **Extra Initialisation** strings that should be sent to the radio modem.

#### **Icom IDAS**



The IDAS configuration tab is split into four sections.

The **Fleet Settings** section contains two fields where the **Common Id** and **Base Id** programmed into the base radio are displayed / set.

The **Command** section has an option for choosing the version of the IDAS command protocol to use.

The **Special Status Mapping** section allows **Ignition On**, **Ignition Off**, **Emergency** and **GPS Poll** request statuses to be mapped so that RevAdmin can use them internally for event monitoring and position requests.

Finally, the **Miscellaneous** section contains options for requesting acknowledgments when sending Polls and Statuses as well as an option that can be used in conjunction with automated polling. If this option is ticked, only units that have sent an Ignition On status or have sent a recent position, will be polled in the normal list. This is useful in fleets where frequent polling is required as units that are off will not create what is essentially a dead polling slot.

Please note that the Request ACK options should both be left ticked!

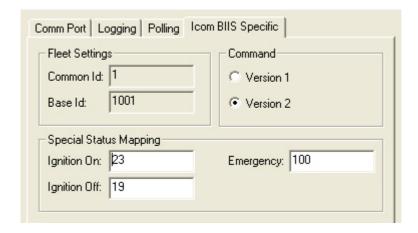
#### Under IDAS Version 1:

- The Common Id and Base Id values are determined directly from the radio and cannot be altered.
- The Emergency status value is used can be set.

#### Under IDAS Version 2:

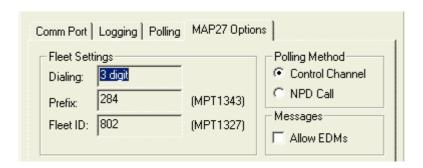
• The Emergency status is not used as Emergency notification is handled differently.

#### **Icom BIIS**



The BIIS configuration tab is similar to IDAS Versdion 1 outlined above. The key difference being that GPS Poll request functionality is not supported.

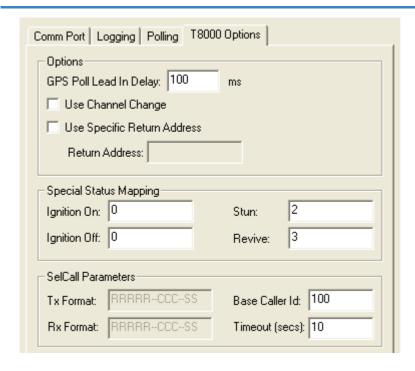
### Tait TMR (Trunk)



The number of digits used for dialling along with the **Prefix** and **Fleet ID** will be automatically determined once the program has successfully queried the base radio configuration.

By default the Polling Method will be set to use a **NPD Call**. Access to Control Channel polling is governed by the type of registration code that was used when "unlocking" the program. If you have access to this option and have been given the okay by the network operator then by all means use it if it is more appropriate. If the mobiles in the field support the display of Extended Data Messages then tick the **Allow EDMs** box if desired.

### Tait PMR (Conventional)



There are three configuration sections for T8000 series bases.

The first **Options** section contains essentially three options:

**GPS Poll Lead In Delay**, as it suggests, controls the lead in delay for GPS polls and is specified in milliseconds. This number should be no less than 60ms and can be varied upwards to several thousand milliseconds if necessary. You may need to experiment with this parameter for optimum results, particularly if one or more repeaters are in use as part of the radio network.

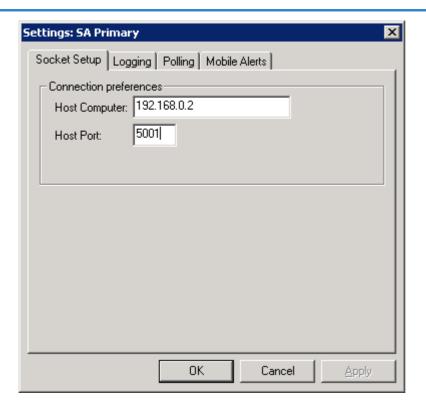
**Use Channel Change** informs the system that vehicle Mobile Ids may have channel information attached and to use this information when communicating with the remove unit. Channel information is attached to the end of a Mobile Id using a colon and then the channel eg 80010236:2

**Use Specific Return Address** and its complementary **Return Address** text field allow a particular base's ld to be entered so that all poll replies go to it instead of the initiating base device.

The **Special Status Mapping** section provides four edit fields for configuring specially designated Status items which are used in conjunction with Selcalls.

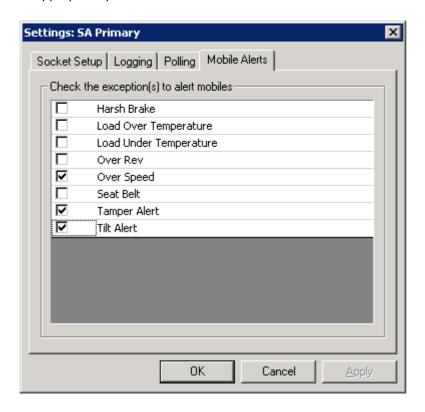
The **Selcall Parameters** section currently allows the Base's Caller Id to be set along with a Timeout after which unanswered Selcall's received by the base are considered to have been missed. The Selcall Tx & Rx format supported by RevAdmin is currently fixed as indicated above.

**Status Automator Gateway Socket Setup Tab** 



Enter in the name of the computer that is running the Status Automator Gateway software and the port it is listening for connections on.

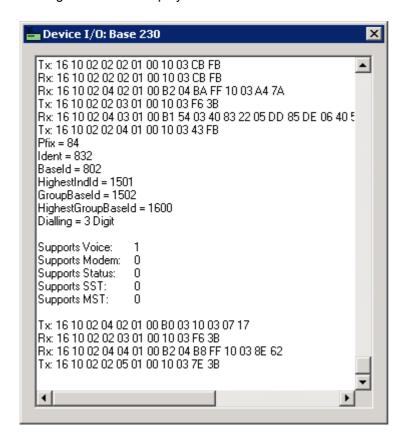
Click on the Mobile Alerts tab and check the type of events that will result in SMS notifications being broadcast to appropriate personnel.



Once you have set all of the various options you click on the OK button to update the Device's settings. An example is shown below indicating that the Device is set to operate on Port 3 and is currently idle.



An interpreted stream of input and output data for a device can be displayed by highlighting it in the list and clicking on the Display button. A window similar to the one below will be displayed.



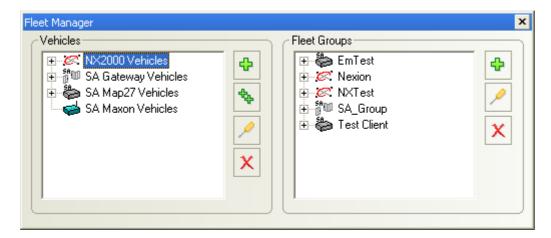
There is one window per device and each window includes the Device's name as part of its caption

# Fleet Manager

## **Fleet Manager Overview**

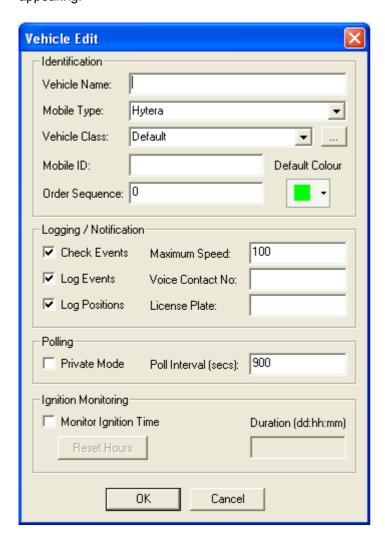
All devices that will be used in conjunction with Reveloc must be setup through the Fleet Manager interface. Details for each vehicle are stored in a Microsoft Access database.

The Fleet Manager can be accessed from either the toolbar button or from the Fleet Manager... item on the View menu. An example of this dialog is shown below.



# **Adding A Vehicle**

New devices can be set up by clicking the Add button. This should result in a blank Vehicle Edit window appearing.



Vehicles are added by entering appropriate information and clicking on **OK**. Each field is explained below:

### Identification

Vehicle Name	A user friendly description that will be used throughout the application to reference the vehicle.
Mobile Type	Select the appropriate type of communications this device uses from the drop down list.
Vehicle Class	The Vehicle Class field is designed for use in distinguishing between types of vehicles in upcoming reports.
Mobile Id.	The identification string for the mobile device.
Order Sequence	If required enter a number that will be used for ordering the vehicles in the Vehicle Summary. Vehicles are sorted first by their Order Sequence number and then alphabetically by Vehicle Name.

Default Colour	Default colour to use when displaying this vehicle's normal position. If event tracking is being used then these colours will be used instead of the default colour where appropriate.

# Logging / Notification

Check Events	Tick this box if you want to check for events as defined in the Event Configuration section
Log Events	Tick this box if you want the Event Information logged to either the database or a file.
Log Positions	Tick this box if you want each position to be logged to either the database or a file.
Maximum Speed	If you wish to set a maximum speed for the vehicle you can do this here. Any speeds returned that are over this amount will trigger an event.
Voice Contact No	Optional mobile phone number in case emergency contact is required. This number and the License Plate number below are displayed in the RevViewer Emergency Alert window if an SOS is triggered for the vehicle.
License Plate	Optional License Plate identification.

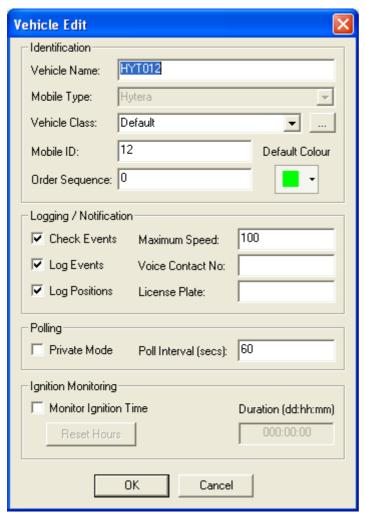
## **Polling**

Private Mode	Tick this box if the vehicle should not be tracked. This setting can be useful for situations where an employee has been granted use of a vehicle for private purposes (eg. on a rostered day-off) and information on there whereabouts should not be obtained / retained.
Poll Interval	The maximum number of seconds that should ideally transpire between positions when the unit is active.

## **Editing A Vehicle's Details**

The details associated with a vehicle can be modified as follows:

- 1. Find the device you wish to maintain in the Fleet Manager's **Vehicle** tree.
- Either double click on it or single click on it to highlight it and then click the Edit button.
   You should see the Vehicle Edit window with the selected vehicle's details filled out.
- 3. Simply modify the appropriate settings and click on **OK**.



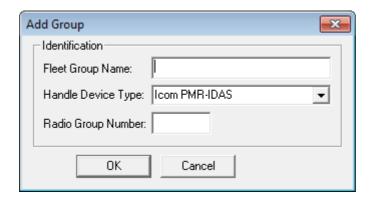
Note: If you no longer wish to use a vehicle then you can remove it from the system by highlighting it in the Vehicle tree and pressing the Delete button.

## **Adding A Vehicle Fleet**

Once you have entered the details for each vehicle you must then associate it with at least one vehicle fleet if you want to request positions for it or display it on a map.

Depending on how many vehicles are being tracked, it may be appropriate to have only one Fleet defined. A new fleet can be created as follows:

1. Click on the New button in the Fleet Groups section.
You should see a window similar to the one below.

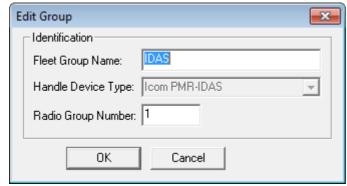


- 2. Type in an appropriate **Fleet Group Name** that summarises the type of vehicles that will be grouped eg. Sales.
- 3. Choose the appropriate communication method for vehicles in this group from the **Handle Device**Type dropdown list.
- 4. Enter in the Radio Group Number if applicable.
- 5. Click on OK.

# **Renaming A Vehicle Fleet**

If you wish to rename an existing Vehicle Fleet, you can do so as as follows:

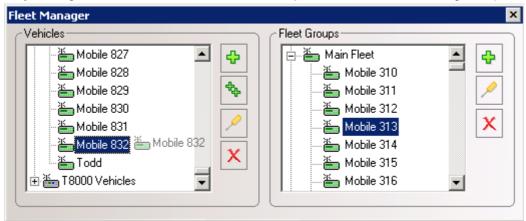
- 1. Find the Fleet you wish to rename in the Fleet Manager's **Fleet** tree.
- 2.
  Single click on it to highlight it and then click the Edit button.
  You should see the Edit Group window with the selected fleet's name already filled in.
- 3. Type over it with the new name and click on **OK** to save the change.



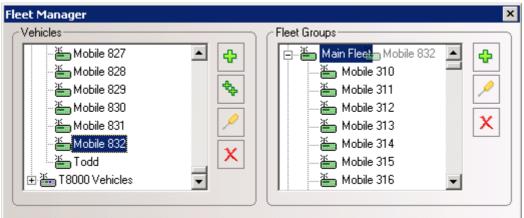
## Adding A Vehicle To A Fleet

Vehicles can can be associated with a Fleet as follows:

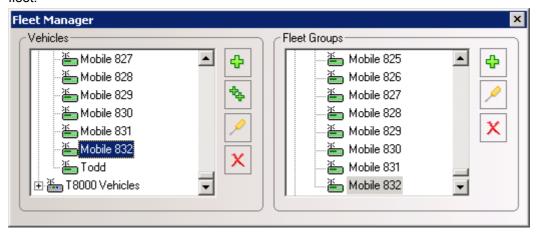
- 1. Left click on the vehicle(s) you wish to associate with a fleet and hold down the mouse button.
- 2. As you drag the vehicle across to the Fleet Groups tree the cursor will change shape.



3. When the vehicle is over the **Fleet Groups** tree, it will highlight the entry under the cursor.



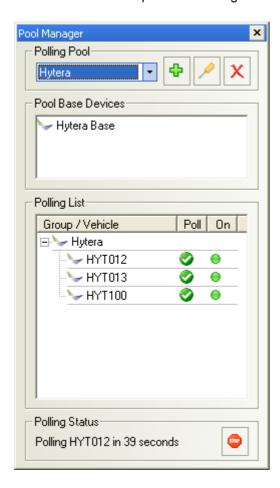
4. Once the appropriate Fleet Group is highlighted, release the mouse button to drop the vehicle onto that fleet.



# **Pool Manager**

## **Pool Manager Overview**

The Pool Manager can be accessed from either the toolbar button or from the **Pool Manager...** item on the **View** menu. An example of this dialog is shown below.



The Pool Manager interface is used to create or maintain one or more Polling Pools. Each Polling Pool can have one / more base devices associated with it along with one / more Fleet Groups.

## **Polling Vehicles**

### **Adding A Polling Pool**

The first step in adding a new Polling Pool is to click on the Add icon in the Pool Manager to bring up the Pool Edit window.



Simply enter in the name for the new pool in the **Pool Name** field.

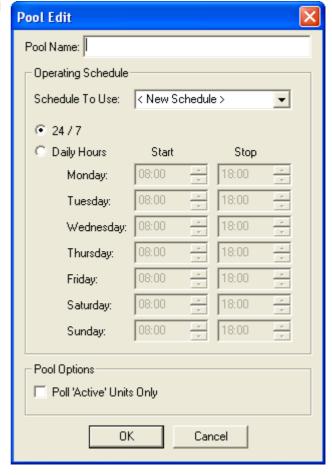
Leave the **Schedule To Use** as **< New Schedule >** if you wish to create a new schedule for the pool or, if you have existing schedules, click on the drop down and select the appropriate one from the list.

If the < **New Schedule** > option is selected then the new schedule will have the same name as that entered in the Pool Name field.

Next, select the Operating Schedule type ie. **24/7** for round the clock polling or **Daily Hours** if you want to set up a time based window within which polling should take place.

Finally, tick the **Poll 'Active' Units Only** box if you only want to attempt polling for units after they have indicated they are on ie. they have sent a power on (or other) status or have recently sent in a position response / unsolicited position.

Click on **OK** to add the new Pool to the system



### Maintaining A Pool's Base Devices

If desired, each Pool can have multiple base devices associated with it and mixed device types are also allowed. The only constraint being that a base device cannot be associated with more than one pool.

In order to associate a base device, simply right mouse click anywhere within the **Pool Base Devices** list and choose the **Add Base Device...** option.



A new dialog will pop up allowing you to select an appropriately available base device. Once selected, click on **OK**.

Base devices can also be removed by right clicking on the name and selecting the **Remove Base Device** option.



## Adding / Removing A Fleet Group

In order to poll one or more vehicles, they must be associated with a Polling Pool. This can be achieved as follows:

Right click anywhere in the Polling List section and choose the **Add Group...** item.



Select the appropriate Group from the drop down list and click on **OK**.



The Group and all of its associated units will be added to the Polling List.

Alongside each unit's name are two columns. The first has a symbol indicating whether or not the unit would normally be polled.

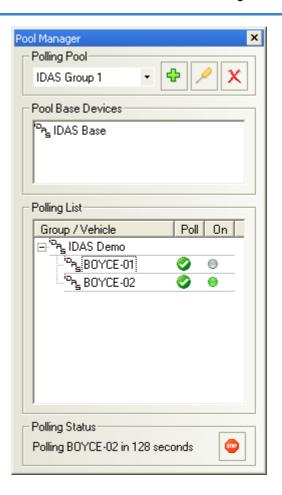
- Unit will be included in poll schedule
- Unit will be skipped

The second column, titled On, has three possible indicators:

- Unit is inactive (off / lost contact)
- Unit has not been in contact for a set period
- Unit is currently active

Once a Group has been added it can also be removed by right clicking on the appropriate Group name and selecting the **Remove Group** option.

If you do not wish for one or more select units within a group to be polled then right click on the relevant item and choose the **Exclude From Poll List** option. It can easily be added in at a later time via the right click **Include In Poll List** option.



### **Controlling Polling**

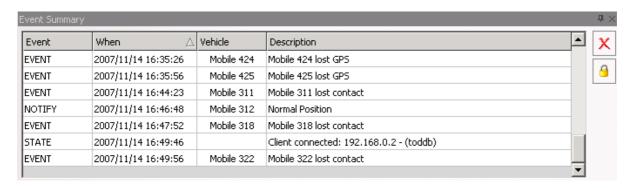
Polling of units within a Pool's list will happening automatically in line with the Pool's schedule. If polling is currently underway then it can be temporarily paused by clicking on the Stop button in the Polling Status section. It should be noted though that this "pause" is only temporary and polling will automatically resume after a predefined period (by default this is two minutes).

# **Display Summarys**

## **Connection Manager**

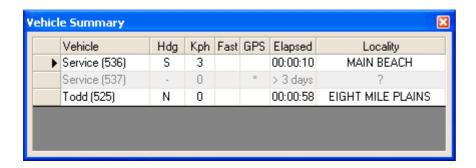


The Connection Manager is really just a simple list of all of the users currently connected to the RevAdmin program. Information displayed includes the "Client's" IP Address and the User Name they are logged in under. Information about when each user connects / disconnects is displayed as a STATE event in the Event Summary window.



## **Vehicle Summary**

A brief summary of the status of each active vehicle can be displayed by clicking on the button of the toolbar. The layout of this window is dependent on the event monitoring settings (see <a href="Event Configuration">Event Configuration</a>). When not using user defined events, the window will look similar to the one below.

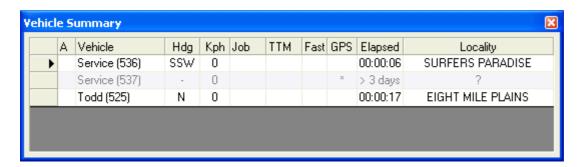


Each row of the grid contains the **Vehicle** name, Lost **GPS** flag, **Elapsed** time since last successful poll, Speed (**Kph**), Heading (**Hdg**) and current Suburb (**Locality**) if available.

If a vehicle has not been contacted within the Lost Contact time period, its row in the grid will be coloured light gray and the Lost **GPS** field updated with an asterisk.

If the vehicle has a maximum speed set and the vehicle is travelling in excess of that, an asterisk will appear in the **Fast** column.

When using user defined events, a few extra fields are displayed:



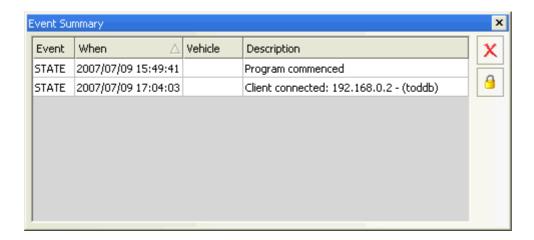
these include an Alarm flag (A), a **Job** number corresponding to the section of road the vehicle is on, a Time To Main base (**TTM**).

Note: The Locality field display has been temporarily disabled.

## **Event Summary**

The Event Summary window contains a time stamped list of "events" that have occured since program commencement.

It can be displayed by selecting the Event Summary item from the View menu or clicking on the button.



Please note that the event grid is only designed to retain the five hundred most recent events. Once this limit is reached, the first fifty items are deleted.

All items can also be deleted by clicking on the button.

By default the Event Summary automatically scrolls so that the most recent event is always visible in the grid.

If you wish to scroll back and view past events then click on the lock button to change the state so that scrolling is enabled. Once you have finished reviewing the events simply click on the button to re-automate the recent event tracking.

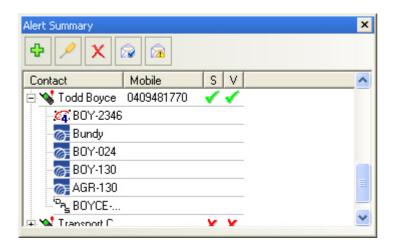
### **Event Types**

=voiit iypoo	
STATE	Program Commencement, Server Connection / Disconnection.
EVENT	Lost Contact, Speeding, Proximity and Stoppage alerts.
ALARM	Reserved for future use.
NOTIFY	Refresh events generated from the server for jobs, vehicles etc
ATTN	These events are coloured red and indicate a failure has occured that may require attention eg. Sending Job details fails.
REQUEST	Requests made to the server for job allocation and messaging.

## **Alert Summary**

The functionality outlined in this section is currently not available for all systems as it ties in closely with different devices status and emergency notifications.

The Alert Summary window can be accessed from either the toolbar button or from the Alert Summary item on the View menu.



The window is designed to allow lists of vehicles to be associated with "alert" contact numbers so that when an SOS is transmitted by a vehicle or a particular preset status is received at the base, then all associated contact numbers can be sent an SMS / email indicating that the vehicle has raised an alarm. It also provides a mechanism whereby various System Alerts (like Primary RevViewer link failures) can be broadcast to relevant network administration staff as well.

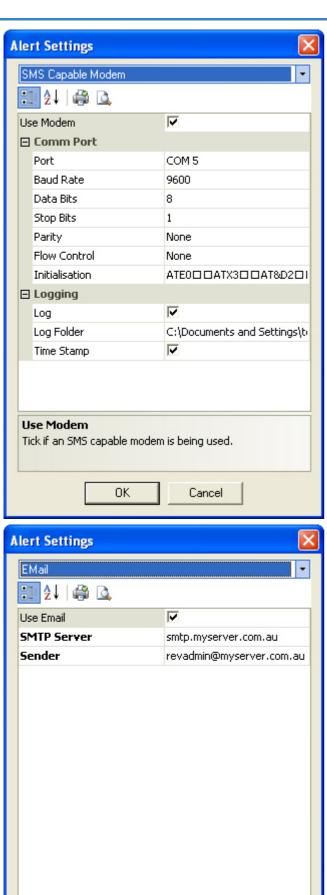
New contact numbers can be added by clicking on the button.



Once entered, they can be edited by clicking on the button or deleted using the button.

Vehicles can be associated with a contact number by dragging them from the Fleet Manager's Vehicles list onto the number in question. A whole fleet can be associated in a similar manner (drag from the Fleet Groups list instead).

Clicking on the button will bring up the Alert Settings window where the SMS / Email configuration can be customised. The SMS messages themselves can be sent using either an SMS capable modem or via a suitable Web Service (account required). Emails require an appropriate SMTP server with relevant permissions.





**Use Email** 

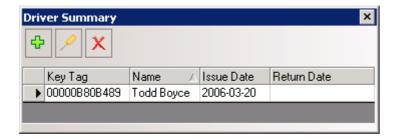
Tick if email based alerts should be sent.

OΚ

Cancel

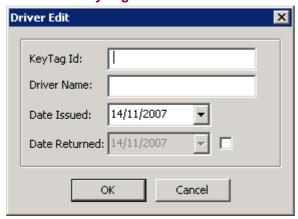
## **Driver Summary**

The Driver Summary window is designed to be a simple interface for the maintenance of which Key Tags have been given to which drivers. An Issue date and Returned Date are also required so that keys can be transferred upon employment or contract completion.



## **Add A New Driver**

- 1. Click on the button.
- 2. Enter in the Key Tag Id value and driver's Name. The Issue Date will default to the current date.



3. Click on OK to save your changes.

### **Editing Driver Details**

Driver details can be updated by selecting the appropriate row and clicking on the button to bring up the Edit window. Once the window is visible, make the necessary changes and click on OK.

### **Removing Driver Details**

Driver details can be removed by selecting the appropriate row and clicking on the button

### **Filtering Driver Details**

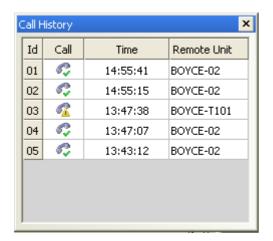
Driver details can be filtered so that only currently assigned Drivers are visible. This is achieved by right clicking on any grid row to bring up the Driver context menu and then selecting the **Current Drivers** option.



# **Call History**

The Call History window displays a simple chronological list (most recent first) of calls received / missed on any Tait base in conventional mode or Icom IDAS base using Version 2 commands.

Only the most recent 30 calls are displayed.



## **Contact Us**

Please direct all initial correspondence and support requests to the dealer you purchased your system from. If you need to contact us directly then please use the contact information below.

Emailing support is the preferred method of contact.



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